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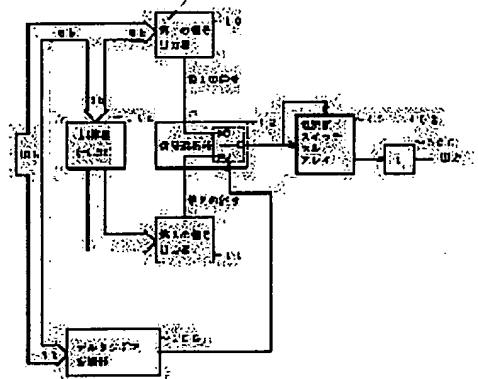
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## (54) D/A CONVERTER AND FREQUENCY SYNTHESIZER USING THIS D/A CONVERTER

## (57)Abstract:

**PURPOSE:** To improve the accuracy of an output signal from the D/A converter using interpolation based on delta/sigma modulation and to suppress the fluctuation of an output frequency from the frequency synthesizer using the D/A converter.

**CONSTITUTION:** This D/A converter is provided with a delta/sigma modulator 100 for performing the delta/sigma modulation to the low-order (n) bits of an N-bit input digital signal, first and second signal outputting devices 10 and 11 for outputting first and second signals to be used for selecting respective current source switch cells 402 corresponding to high-order (N-n) bits and high-order (N-n) bits + 1LSB, signal selector circuit 12 for selecting any one of first and second signals based on the output change of the delta/sigma modulator 100, and filter circuit 500 for smoothing the total sum of output currents from the respective current source switch cells 402 turned to an output state corresponding to the first or second signal selected by the signal selector circuit 12.



## LEGAL STATUS

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